DMPS-100-C

MediaManager

DigitalMedia™ Presentation System 100

- *High-Definition multimedia system switcher, mic mixer, audio DSP, amplifier, and control system*
- *DigitalMedia™ display output featuring DM 8G+™ technology*
- *Supports HDBaseT™ Alliance specifications*
- *Signal switching for up to 4 sources*
- *Handles HDMI®, DVI, DisplayPort Multimode, and SPDIF digital sources*
- *Handles RGB, composite, S-Video, component, and stereo audio analog sources*
- *Features auto-detecting, auto-switching inputs for all types of video and audio sources*
- *Includes built-in 2-channel gated microphone mixing w/DSP*
- *Affords versatile audio signal mixing and routing to 3 separate outputs*
- *Allows audio-follow-video or breakaway switching for all inputs*
- *Enables HDMI audio signal extraction and embedding*
- *Provides 2 stereo analog outputs with independent DSP per output*
- *Features built-in 40 Watt amplifier, selectable for 8 Ohm stereo or 70/100 Volt mono operation*
- *Multi-channel PCM, Dolby®, and DTS® audio signals can be routed to the HDMI and DM 8G+ output*
- *DigitalMedia 8G+™ connectivity affords a single-wire CAT5e interface for the display device[2]*
- *Furnishes Power over DM® or HDBaseT for a PoDM/PoH-powered device[3]*
- *QuickSwitch HD® technology manages HDCP keys for fast, reliable switching*
- *Auto-Locking™ technology achieves rapid switching between disparate sources*
- *Performs automatic AV signal format management via EDID*
- *High-Definition scaler options available*
- *Integrated Ethernet switch provides a single-point LAN connection*
- *Private Network Mode — requires just two IP addresses for the complete system*
- *2-Series control system provides fully-programmable device control*
- *Supports Crestron® touch screens, keypads, and wireless remotes*
- *Onboard e-Control® Web server*
- *Supports Core 3 UI™ XPanel Web-based remote control*
- *Supports Crestron Mobile® control apps for iPhone®, iPad® and Android™*
- *Supports Fusion RV® and SNMP remote management*
- *Provides easy setup and diagnostics via front panel or software*
- *Internal universal power supply for worldwide compatibility*
- *3-space 19-inch rack-mountable*

The DMPS-100-C from Crestron® is a complete, high-definition presentation control and signal switching solution for boardrooms and lecture halls. Integrating the control system, multimedia switcher, 2-channel mic mixer, audio DSP, and amplifier all into one 3-space rack mount package, the DMPS-100-C affords flexible signal routing and high-performance signal processing without the need for separate components. Auto-configuring inputs enable plug-and-play compatibility with a wide range of digital and analog sources. Built-in DigitalMedia™ and HDBaseT™ connectivity afford a streamlined wiring solution for interfacing with remote display devices.

HD System Switcher

The DMPS-100-C provides high-performance switching of digital and analog sources. Connectivity is provided for up to four HDMI® sources[1], or other combinations of HDMI, RGB, SPDIF, analog audio, and analog video sources. Input auto-detection and auto-switching eliminates the need to configure the inputs - simply connect your source and the DMPS-100-C selects the right audio and video combination. Built-in audio matrix switching allows routing of four different sources to one digital and two analog audio components. Both HDMI and DM 8G+™ outputs are provided to feed the same output signal to two separate displays or other equipment.

Flexible Audio Routing

The HDMI, SPDIF, and analog audio inputs may be configured to follow their associated video inputs, or switched independently. In fact, the audio from any HDMI source can be extracted from the digital stream and converted to analog to feed an outboard processor, mixer, or codec, with the return signal feeding back through any analog input, which can be embedded with any video source to form a new HDMI output. Routing of multi-channel PCM, Dolby®, and DTS® audio sources is supported through the HDMI and DM 8G+ outputs. The HDMI, SPDIF, and analog audio inputs include adjustable input compensation to accommodate a wide range of signals and maintain consistent volume levels when switching between sources.

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DMPS-100-C – Rear View

DigitalMedia 8G+™

The integrated DM 8G+ output affords the ultimate in simplicity, providing a true one-wire interface for a display devices. Simply connect a DM 8G+ receiver to provide signal routing and control for a single projector or flat panel display. Supporting wire lengths up to 330 feet (100 meters), DM 8G+ can also provide an ideal interface to a central DigitalMedia switcher as part of a larger multi-room or room-combining system.

DM 8G+ requires just one CAT5e wire, transporting high-definition video, audio, and Ethernet for the connected device without compromise. Power over DM (PoDM) is supplied over the same CAT5e connection, providing a centralized power source for any PoDM compatible receiver. [2,3]

HDBaseT™

Crestron DigitalMedia 8G+ technology is designed using HDBaseT Alliance specifications, ensuring interoperability with third-party HDBaseT products. Via DM 8G+, the DMPS-100-C can be connected directly to any HDBaseT compliant display device without requiring a DM® receiver. The DMPS-100-C supports 5Play™, the feature set of HDBaseT that converges uncompressed full HD digital video, audio, Ethernet, power[3] and control signals through a single CAT5e or CAT6 cable over distances up to 328 ft (100m).

2-Channel Microphone Mixer

For a complete presentation solution, the DMPS-100-C includes built-in mixing and processing for two microphones. Each mic input provides selectable mic or line level with 40 dB gain adjustment, switchable 48V phantom power, fully-adjustable gating, compression, limiting, and 4-band EQ. Sophisticated matrix mixing allows for a completely different stereo mix of both microphones at each of the DMPS-100-C's three outputs.

Professional Audio DSP

Each analog audio output on the DMPS-100-C includes its own digital signal processor, allowing each output to be optimized to feed a power amplifier, codec, recorder, or assistive listening system. In addition to real-time adjustable volume, bass, treble, and mute controls, each DSP provides 10-band graphic equalization, 2-band parametric equalization, and 85 ms speaker delay adjustment. Hardware relay muting on each output helps prevent "thumping" on power up.

Built-in Amplifier

Its built-in 40-watt amplifier allows the DMPS-100-C to directly drive a pair of stereo speakers, or a string of 70 or 100 Volt ceiling speakers. Fed by the main "Program" output, the internal amplifier benefits fully from the onboard DSP. For larger applications, Crestron AMP-Series power amplifiers may be added, providing a complete solution for driving separate program and speech speakers, or any dual-zone loudspeaker system.

EDID Format Management

The DMPS-100-C allows for management of the EDID (Extended Display Identification Data) information that passes between the display device and input sources in the system. Using Crestron Toolbox™ software, the format and resolution capabilities of each device can be assessed, allowing the installer to configure EDID signals appropriately for the most desirable and predictable behavior.

A Scaler for Every Display

Through a distributed scaler approach, the DMPS-100-C affords a very flexible and user-friendly solution for handling multiple disparate display devices. Employing discrete outboard scalers like the HD-SCALER[4] and DM-RMC-SCALER-C[4], the DMPS-100-C allows an independent high-performance scaler to be installed at every display device, ensuring an optimal image on every screen no matter what source is selected.

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QuickSwitch HD® Technology

Handling high-definition digital media means handling HDCP (High-bandwidth Digital Content Protection), the encryption scheme used by content providers to protect their DVDs, Blu-ray discs, and broadcast signals against unauthorized copying. Viewing HDCP encrypted content requires a source device to "authenticate" each display and signal processor in the system and issue it a "key" before delivering an output signal.

Using a conventional HDMI or DVI switcher, it is common to experience a complete loss of signal for up to 15 seconds during the authentication process each time a new source or display is selected anywhere in the system. Also, every source device has a limited number of keys available, so connect too many displays and the source will simply stop outputting a signal without warning.

Crestron QuickSwitch HD manages the keys for every HDCP-compliant device in the system, maintaining continuous authentication for each device to ensure fast, reliable routing of any source to any number of display devices.

Auto-Locking™ Technology

Crestron Auto-Locking Technology enables super fast signal switching by instantaneously configuring every device in the signal path, including DM receivers and scalers, as soon as the signal hits the first device. Whether switching between sources or TV channels, Auto-Locking significantly reduces the time it takes each device to sense the new signal and configure itself to handle the changes, virtually eliminating any noticeable gap while switching.

Built-in Ethernet Switch

In addition to transporting digital video and audio, the DigitalMedia 8G+ port on the DMPS-100-C can also extend Ethernet out to the display device. Ethernet is also utilized internally by the Crestron control bus to manage the receiver and provide device control.

Private Network Mode

To streamline its implementation on a corporate or university LAN, the DMPS-100-C employs Private Network Mode to provide a single-point connection for the complete system. Using Private Network Mode, the DMPS-100-C requires just one IP address for the complete DM network, plus one additional IP address for the built-in control processor.

Integrated Control System

Its built-in 2-Series control system enables the DMPS-100-C to provide complete, customizable control of every AV device, as well as room lighting, window shades, and projection screens, without requiring a separate control processor. The DMPS-100-C supports the full line of Crestron touch screens, keypads, and wireless remotes for a user experience custom tailored to the specific requirements of each end-user. Support for Crestron e-Control®, Crestron Mobile®, Fusion RV®, and RoomView® applications delivers the industry's most powerful platform for attaining remote access and centralized management using computers and mobile devices.

CEC Embedded Device Control

The primary objective of every Crestron system is to enable precisely the control desired for a seamless user experience. In addition to conventional IR, RS-232, and Ethernet device control, the DMPS-100-C can provide an additional alternative by harnessing the CEC (Consumer Electronics Control) signal embedded in HDMI. The DMPS-100-C provides a gateway for controlling many devices right through their HDMI connections, potentially eliminating the need for any dedicated control wires or IR probes. Through proper CEC signal management, the DMPS-100-C allows you to take control of each device as you like.

Easy Setup

Every step of the DMPS-100-C setup process is designed to be quick and easy using its front panel or Crestron Toolbox software, configuring inputs and outputs automatically while letting the installer make intelligent design decisions along the way. Out of the box, the DMPS-100-C front panel supports basic signal routing for easy testing and troubleshooting during installation. The front panel label strips can be customized using Crestron Engraver software or standard 3/8" tape labels, allowing for the clear designation of each input and output. Inputs and outputs may also be designated by name through the software to appear on the LCD display.

SPECIFICATIONS

Operating System

Crestron® 2-Series; real-time, preemptive, multi-threaded/multitasking kernel; FAT32 file system with long names

Memory

SDRAM: 32 MB
NVRAM: 256 KB
Flash: 16 MB

Communications

Ethernet: 10/100/1000 Mpbs; auto-switching; auto-negotiating; auto-discovery; full/half duplex; TCP/IP; UDP/IP; CIP; DHCP; Private Network Mode; SSL; SNMP; IPv4; RSTP; SMTP e-mail client; Web Server; installer setup via Crestron Toolbox™; supports all e-Control®, Core 3 UI™ XPanel, Crestron Mobile®, Crestron Fusion™ and RoomView® applications
Cresnet: Cresnet® master mode
DigitalMedia: DM 8G+™, HDCP, EDID, CEC, PoDM , HDBaseT™ compliant
HDMI: HDMI®, HDCP, EDID, CEC
USB: USB service port for computer console, USB HID signal routing over DM
RS-232: 2-way device control and monitoring up to 115.2k baud with hardware and software handshaking
IR/Serial: 1-way device control via infrared up to 1.2 MHz or serial TTL/RS-232 (0-5 Volts) up to 115.2k baud; supports CNXRMIRD IR Receiver[4]

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Ethernet Switch

5-port switch with Private Network Mode; provides (1) rear panel 10/100/1000Base-T Gigabit Ethernet port and (4) internal 10Base-T/100Base-TX Ethernet ports for the control processor, switcher, audio DSP, and DM port

Video

Switcher: Auto-detecting multi-format digital/analog source inputs, 4x1 switcher, HDMI and DM 8G+ outputs, QuickSwitch HD® technology
Input Signal Types: HDMI (Inputs 1-4), RGB[5] (Inputs 2-4), composite/S-Video/component (Input 4)
Output Signal Types: HDMI, DM 8G+/HDBaseT
Formats: HDMI w/Deep Color & 3D[6], DVI[1], DisplayPort Multimode[1], HDCP content protection support, HD up to 1080i/1080p, computer up to UXGA/WUXGA, RGBHV, RGBS, RGSB, YPbPr, Y/C, NTSC, PAL
Input Resolutions, HDMI, Progressive: 640x480@60Hz, 720x480@60Hz (480p), 720x576@50Hz (576p), 800x600@60Hz, 848x480@60Hz, 852x480@60Hz, 854x480@60Hz, 1024x768@60Hz, 1024x852@60Hz, 1024x1024@60Hz, 1280x720@50Hz (720p50), 1280x720@60Hz (720p60), 1280x768@60Hz, 1280x800@60Hz, 1280x960@60Hz, 1280x1024@60Hz, 1360x768@60Hz, 1365x1024@60Hz, 1366x768@60Hz, 1400x1050@60Hz, 1440x900@60Hz, 1600x900@60Hz, 1600x1200@60Hz, 1680x1050@60Hz, 1920x1080@24Hz (1080p24), 1920x1080@25Hz (1080p25), 1920x1080@50Hz (1080p50), 1920x1080@60Hz (1080p60), 1920x1200@60Hz, 2048x1080@24Hz, 2048x1152@60Hz, plus any other resolution allowed by HDMI up to 165MHz pixel clock
Input Resolutions, HDMI, Interlaced: 720x480@30Hz (480i), 720x576@25Hz (576i), 1920x1080@25Hz (1080i25), 1920x1080@30Hz (1080i30), plus any other resolution allowed by HDMI up to 165MHz pixel clock
Input Resolutions, RGB: 640x480@60Hz, 720x480@60Hz (480p), 720x576@50Hz (576p), 800x600@60Hz, 848x480@60Hz, 1024x768@60Hz, 1280x720@50Hz (720p50), 1280x720@60Hz (720p60), 1280x768@60Hz, 1280x800@60Hz, 1280x960@60Hz, 1280x1024@60Hz, 1360x768@60Hz, 1366x768@60Hz, 1400x1050@60Hz, 1440x900@60Hz, 1600x1200@60Hz, 1680x1050@60Hz, 1920x1080@50Hz (1080p50), 1920x1080@60Hz (1080p60), 1920x1200@60Hz, 2048x1152@60Hz
Input Resolutions, Component: 480i, 576i, 480p, 576p, 720p50, 720p60, 1080p24, 1080i25 (1125 lines), 1080i30, 1080p30, 1080p50 (1125 lines), 1080p60
Input Resolutions, Composite and S-Video: 480i, 576i
Output Resolutions: Matched to inputs
Analog-To-Digital Conversion: 10-bit 165 MHz per each of 3 channels

Audio

Switcher/Mixer: 2-channel gated mic mixer w/DSP, auto-detecting multi-format digital/analog source inputs, 4x3 stereo source switcher, 4x1 multi-channel source switcher, analog and HDMI outputs, DM 8G+/HDBaseT output, independent 2-ch mic + source mixer per output, independent stereo DSP per analog output, integrated power amplifier, digital audio pass-through mode

Typical of 2 microphone input channels:
Input Signal Types: Mono analog mic or line level
Analog-To-Digital Conversion: 24-bit 48 kHz
Phantom Power: Enable/Disable per channel
Gain: +12 to +57 dB (mic level), adjustable from 0% to 100%, plus mute
Delay: 0.0 to 85.3 ms
EQ Center Frequencies: 160, 500, 1.2k, 3k Hz
EQ Gain: ±12.0 dB per band
Gating Level (Threshold): -80 to 0 dB
Gating Depth (Attenuation): -80 to 0 dB
Gating Attack: 1 to 250 ms
Gating Decay (Release): 1 to 1000 ms
Compression Level (Threshold): -80 to 0 dB
Compression Ratio: 1:1 to 10:1
Compression Attack: 1 to 250 ms
Compression Release: 1 to 1000 ms
Compression Curve: Hard or soft knee
Limiting Level (Threshold): -80 to 0 dB
Limiting Attack: 1 to 250 ms
Limiting Release: 1 to 1000 ms
Limiting Curve: Hard or soft knee

Typical of 4 source input channels:
Input Signal Types: HDMI or DisplayPort Multimode[1] (Inputs 1-4), analog 2-channel (Inputs 1-4), S/PDIF (Input 4)
Formats, Analog: Stereo 2-Channel
Formats, HDMI & DM: Dolby Digital®, Dolby Digital EX, DTS®, DTS-ES, DTS 96/24, up to 8ch PCM
Formats, SPDIF: 2ch PCM
Analog-To-Digital Conversion: 24-bit 48 kHz
Input Compensation: ±10.0 dB

Typical of 2 analog line outputs w/DSP:
Output Signal Type/Format: Stereo 2-Channel
Digital-To-Analog Conversion: 24-bit 48 kHz
Volume: -80 to +20 dB, adjustable from 0% to 100%, plus mute
Bass: ±12.0 dB
Treble: ±12.0 dB
Mic Mix Gain (x2): -80.0 to 0.0 dB, plus mute
Mic Balance (x2): 0dB to -80dB, either channel from center
Source Mix Gain: -80.0 to 0.0 dB, separately adjustable for Left and Right, plus mute
Mixer Presets: 1 thru 5
Equalization: 10-band graphic + 2-band parametric
GEQ Center Frequencies: 31.5, 63, 125, 250, 500, 1k, 2k, 4k, 8k, 16k Hz
GEQ Gain: ±12.0 dB per band
GEQ Presets: 1 thru 10
PEQ Center Frequencies: 5 to 24000 Hz per band
PEQ Gain: -36.0 to +24.0 dB per band
PEQ Bandwidth: 0.02 to 3.50 octaves per band
PEQ Types: Peaking EQ, High Pass, Low Pass, High Shelf, Low Shelf, Notch

Delay: 0.0 to 85.3 ms
Frequency Response: 20Hz to 20kHz ±0.5 dB (digital source);
20Hz to 20kHz ±0.5 dB (analog line source);
20Hz to 20kHz ±0.7 dB (microphone source)
S/N Ratio: >108 dB (digital source), 1 kHz, A-weighted;
>103 dB (analog line source), 1 kHz, A-weighted
THD+N: <0.002% (digital source), 20 Hz to 20 kHz;
<0.005% (analog line source), 20 Hz to 20 kHz;
<0.05% (microphone source), 20 Hz to 20 kHz
Stereo Separation: >108 dB (digital source);
>103 dB (analog source)
Channel Separation: >103 dB

HDMI/DM output:
Output Signal Types: HDMI, DM 8G+/HDBaseT
Formats: Dolby Digital, Dolby Digital EX, DTS, DTS-ES, DTS 96/24, up to 8ch PCM
Volume: -80 to +20 dB, adjustable from 0% to 100%, plus mute[7]
Mic Mix Gain (x2): -80.0 to 0.0 dB, plus mute[7]
Mic Balance (x2): 0dB to -80dB, either channel from center[7]
Source Mix Gain: -80.0 to 0.0 dB, separately adjustable for Left and Right, plus mute[7]
Frequency Response: 20Hz to 20kHz ±0.5 dB (digital source);
20Hz to 20kHz ±0.5 dB (analog line source);
20Hz to 20kHz ±0.7 dB (microphone source)
S/N Ratio: >108 dB (digital source), 1kHz, A-weighted;
>103 dB (analog line source), 1kHz, A-weighted
THD+N: <0.002% (digital source), 20 Hz to 20 kHz;
<0.005% (analog line source), 20 Hz to 20 kHz;
<0.05% (microphone source), 20 Hz to 20 kHz
Stereo Separation: >108 dB (digital source);
>103 dB (analog source)
Channel Separation: >108 dB (digital source);
>103 dB (analog source)

Stereo Amplified Output (same signal as Program output):
Output Power, 4/8 Ω: 20 Watts RMS per channel at 8 Ohms, 4 Ohms tolerant
Output Power, 70/100V: 40 Watts RMS
Frequency Response: 20 Hz to 20 kHz ±1 dB @ 20 Watts into 8 Ohms;
100 Hz to 20 kHz ±2.5 dB @ 70 or 100 Volts
S/N Ratio: 98 dB @ 20 Watts into 8 Ohms, 1 kHz, A-weighted;
96 dB @ 20 Watts in 4 Ohms, 1 kHz, A-weighted
THD+N: <0.1% (1 kHz), <0.7% (20 Hz to 20 kHz), @ 20 Watts into 4 or 8 Ohms
Stereo Separation: >65 dB @ 20 Watts, 1 kHz

Connectors – Audio/Video Inputs

HDMI INPUT 1 – 4: (4) 19-pin Type A HDMI female, digital video/audio inputs;
Signal Types: HDMI, DVI, or DisplayPort Multimode[1,6]

RGB INPUT 2 – 4: (3) DB15HD female, analog RGB/video inputs;
Signal Types: RGBHV, component, S-Video, or composite[5];
Formats: RGBHV, RGBS, RGsB, YPbPr, Y/C, NTSC or PAL;
Input Level: 0.5 to 1.5 Vp-p with built-in DC restoration;
Input Impedance: 75 Ohms nominal;
Sync Detection: RGBHV, RGBS, RGsB, YPbPr;
Sync Input Level: 3 to 5 Vp-p;
Sync Input Impedance: 2.2k Ohms;
Note: RGB Inputs 2-4 and HDMI Inputs 2-4 are mutually exclusive; HDMI overrides RGB when using the auto-switching feature

Y, PB/Y, PR/C/COMP INPUT 4: (3) BNC female comprising (1) auto-sensing multi-format analog video input;
Signal Types: Component, S-Video, or composite;
Formats: YPbPr, Y/C, NTSC or PAL;
Input Level: 1 Vp-p nominal;
Input Impedance: 75 Ohms nominal;
Note: Video Input 4, RGB Input 4, and HDMI Input 4 are mutually exclusive; HDMI and RGB override Video when using the auto-switching feature

SPDIF INPUT 4: (1) RCA female, S/PDIF coaxial digital audio input;
Input Impedance: 75 Ohms;
Note: SPDIF Input 4 and HDMI Input 4 are mutually exclusive; HDMI overrides SPDIF when using the auto-switching feature

AUD IN 1 – 4: (4) 5-pin 3.5mm detachable terminal blocks;
Balanced/unbalanced stereo line-level analog audio inputs;
Input Impedance: 24k Ohms balanced/unbalanced;
Maximum Input Level: 4 Vrms balanced, 2 Vrms unbalanced;
Note: Analog Audio Inputs 1-4, SPDIF Input 4, and HDMI Inputs 1-4 are mutually exclusive; HDMI and SPDIF override Analog Audio when using the auto-switching feature

MC1/LN1 – MC2/LN2: (2) 5-pin 3.5mm detachable terminal blocks;
Comprises (2) balanced microphone/line audio inputs;
Balanced Mic Input Level: -57 to -12 dBV, 240 mVrms maximum;
Balanced Line Input Level: -28 to +11 dBV, 3.7 Vrms maximum;
Unbalanced Line Input Level: -34 to +5 dBV, 1.85 Vrms maximum;
Mic Input Impedance: 3.9k Ohms, accepts 60 to 600 Ohm source;
Line Input Impedance: 19k Ohms balanced, 9.5k Ohms unbalanced;
Phantom Power: 48 Volts DC, software enabled/disabled per channel

Connectors – Audio/Video Outputs

SPEAKER OUTPUT 4Ω/8Ω L – R: (2) 2-pin 7.62mm 15A detachable terminal blocks;
4-8 Ohm stereo speaker-level audio output;
Wire Size: Terminals accept up to 14 AWG;
Output Power: 20W RMS per channel stereo at 8 Ohms, 4 Ohms tolerant

SPEAKER OUTPUT 70/100V: (1) 2-pin 7.62mm 15A detachable terminal block;
Transformer-isolated 70 or 100 Volt mono speaker-level audio output;
Wire Size: Terminals accept up to 14 AWG;
Output Power: 40W RMS mono at 70 or 100 Volts;
Note: 4Ω/8Ω and 70/100V outputs are mutually exclusive

PROG OUT: (1) 5-pin 3.5mm detachable terminal block;
Balanced/unbalanced stereo line-level audio output;
Output Impedance: 200 Ohms balanced, 100 Ohms unbalanced;
Maximum Output Level: 4 Vrms balanced, 2 Vrms unbalanced

AUX OUT 1: (1) 5-pin 3.5mm detachable terminal blocks;
Balanced/unbalanced stereo line-level audio outputs;
Output Impedance: 200 Ohms balanced, 100 Ohms unbalanced;
Maximum Output Level: 4 Vrms balanced, 2 Vrms unbalanced

HDMI OUTPUT 1: (1) 19-pin Type A HDMI female, digital video/audio output;
Signal Types: HDMI, DVI[1];
Note: HDMI and DM Outputs function in parallel

DM OUTPUT 1: (1) 8-pin RJ45 female, shielded;
DM 8G+ output, HDBaseT compliant;
PoDM and PoH PSE (Power Sourcing Equipment) port[3];
Connects to DM 8G+ input of a DM receiver/room controller or other DM device, or to a HDBaseT device, via CAT5e or Crestron DM-CBL-8G cable[2];
Note: HDMI and DM Outputs function in parallel

Connectors - Control & Power

IR/SERIAL OUT 1 – 4: (4) 2-pin 3.5mm detachable terminal blocks;
IR/Serial output ports;
IR output up to 1.2 MHz;
1-way serial TTL/RS-232 (0-5 Volts) up to 115.2k baud

IR IN: (1) 3-pin 3.5mm detachable terminal block
For connection of the CNXRMIRD IR Receiver[4];
Allows control from IR wireless remotes using RC-5 command set

INPUT 1 – 4: (1) 5-pin 3.5mm detachable terminal block;
Comprises (4) programmable digital inputs;
Input Voltage Range: 0 to 24 Volts DC, referenced to GND;
Logic Threshold: 2.5 Volts DC nominal with 1 Volt hysteresis band;
Input Impedance: 10k Ohms at >5 Volts, 1M Ohms at <5 Volts;
Pull-up Resistor: 2.2k Ohms per input

RELAY 1 – 4: (1) 8-pin 3.5mm detachable terminal block;
Comprises (4) normally open, isolated relays;
Rated 1 Amp, 30 Volts AC/DC;
MOV arc suppression across contacts

COM A – B: (2) DB9 male, bidirectional RS-232 ports;
Up to 115.2k baud, hardware and software handshaking support

NET: (4) 4-pin 3.5mm detachable terminal blocks;
Cresnet Master ports, paralleled;
Available Cresnet Power: 30 Watts

SERVICE: (1) USB Type B female, for factory use only

PoDM 48VDC IN: (1) 4-pin snap & lock power jack;
48 Volt DC power input for PoDM power pack[3];
Enables PoDM and PoH power sourcing

100-240V~4.0A 50/60Hz: (1) IEC C14 male chassis plug, main power input;
Mates with removable power cord, included

G: (1) 6-32 screw, chassis ground lug

LAN: (1) 8-wire RJ45 female, 10/100/1000Base-T Ethernet port

COMPUTER (front): (1) USB Type B female;
USB computer console port (cable included)

LCD Display

Green LCD alphanumeric, adjustable backlight, 2 lines x 20 characters per line; Displays input/outputs by name, volume levels, setup menus, signal routing, device info, and other system information

Controls & Indicators

NET: (1) yellow LED, indicates Cresnet bus activity
LAN: (1) yellow LED, indicates Ethernet activity
HW-R: (1) recessed miniature pushbutton for hardware reset, reboots the control system
SW-R: (1) recessed miniature pushbutton for software reset, restarts the SIMPL program
POWER: (1) pushbutton and green LED, programmable for system power control
SOFTKEYS: (4) pushbuttons for activation of LCD driven functions and passcode entry
MENU: (1) pushbutton, steps menu back one level
▲, ▼: (2) pushbuttons, scroll up or down through menu and adjust menu parameters
ENTER: (1) pushbutton, executes highlighted menu or value
VOLUME: (1) continuous turn rotary encoder, adjusts menu parameters, defaults to Program audio volume
MUTE: (1) pushbutton and red LED, mutes the Program audio output
ROUTE: (1) pushbutton and red LED, selects ROUTE mode to allow routing changes
VIEW: (1) pushbutton and red LED, selects VIEW mode to view current routing
INFO: (1) pushbutton and red LED, selects INFO mode to view AV and device info
INPUT 1 – 4: (4) pushbuttons and red LEDs, select input to be routed
OUTPUT 1, PROG, AUX 1: (3) pushbuttons and red LEDs, select output destination(s)
SPEAKER OUTPUT: (1) 3-position slide switch, selects the amplifier output configuration
DM OUTPUT 1 (rear): (2) LEDs, green LED indicates DM link status, amber LED indicates video and HDCP signal presence
DM OUTPUT 1 PoDM (rear): (1) green LED, indicates downstream device is drawing power over DM
LAN (rear): (2) LEDs, bi-color LED (left) indicates Ethernet speed and activity, green LED (right) indicates Ethernet link status

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Power Requirements

Main Power: 4 Amps @ 100-240 Volts AC, 50/60 Hz
Available Cresnet Power: 30 Watts
Power over DM (PoDM): PoDM PSE (Power Sourcing Equipment), supplies power to a PoDM Powered Device[3]
Power over HDBaseT (PoH): PoH PSE (Power Sourcing Equipment), supplies power to a PoH Powered Device[3]
PoDM Power Pack: 1.875 Amp @ 48 Volts (100-240 Volts AC, 50/60 Hz power pack, model PW-4818DU sold separately)

Environmental

Temperature: 41° to 104°F (5° to 40°C)
Humidity: 10% to 90% RH (non-condensing)
Heat Dissipation: 277 BTU/hr

Enclosure

Chassis: Metal, black finish, fan-cooled, vented sides
Faceplate: Metal, black finish with polycarbonate label overlay
Mounting: Freestanding or 3U 19-inch rack-mountable (adhesive feet and rack ears included)

Dimensions

Height: 5.20 in (133 mm) without feet
Width: 17.28 in (439 mm);
19.00 in (483 mm) with rack ears
Depth: 16.31 in (415 mm)

Weight

16.3 lb (7.4 kg)

MODELS & ACCESSORIES

Available Models

DMPS-100-C: DigitalMedia™ Presentation System 100

Available Accessories

PW-4818DU: 48V Power Pack for PoDM
HD-SCALER: High-Definition Video Scaler
DM-RMC-SCALER-C: DigitalMedia 8G+™ Receiver & Room Controller w/Scaler
DM-RMC-100-C: DigitalMedia 8G+™ Receiver & Room Controller 100
DM-RMC-200-C: DigitalMedia 8G+™ Receiver & Room Controller 200
AMP-2210S: 2x210W Commercial Power Amplifier, 4/8Ω
AMP-3210S: 3x210W Commercial Power Amplifier, 4/8Ω
AMP-2210T: 2x210W Commercial Power Amplifier, 4/8Ω or 70/100V
AMP-3210T: 3x210W Commercial Power Amplifier, 4/8Ω or 70/100V
AMP-2210HT: 2x210W Commercial Power Amplifier, 4/8Ω or High-Power 70V
CNSP-XX: Custom Serial Interface Cable
IRP2: IR Emitter Probe w/Terminal Block Connector
CNXRMIRD: IR Receiver
DM-CBL-8G-NP: DigitalMedia 8G™ Cable, non-plenum
DM-CBL-8G-P: DigitalMedia 8G™ Cable, plenum
DM-8G-CONN-100: DigitalMedia 8G™ Cable Connector, 100-Pack
DM-8G-CRIMP: Crimping Tool for DM-8G-CONN
CRESNET-NP: Cresnet® Control Cable, non-plenum
CRESNET-P: Cresnet® Control Cable, plenum
CRESNET-HP-NP: Cresnet® "High-Power" Control Cable, non-plenum
CRESNET-HP-NP-TL-SP1000: Cresnet® "High-Power" Control Cable, non-plenum, teal, 1000 ft spool
CBL Series: Crestron® Certified Interface Cables
MP-WP Series: Media Presentation Wall Plates
MPI-WP Series: Media Presentation Wall Plates - International Version

Notes:

1. HDMI requires an appropriate adapter or interface cable to accommodate a DVI or DisplayPort Multimode signal. CBL-HD-DVI interface cables available separately.
2. For DM 8G+ wiring, use Crestron DM-CBL-8G DigitalMedia 8G Cable, Crestron DM-CBL DigitalMedia Cable, Crestron DM-CBL-D DigitalMedia D Cable, or generic CAT5e (or better) UTP or STP. Maximum wire length for DM 8G+ is 330 ft (100 m) between devices. Shielded cable and connectors are recommended to safeguard against unpredictable environmental electrical noise which may impact performance at resolutions above 1080p. Refer to the Crestron DigitalMedia Design Guide, Doc. #4546 for complete system design guidelines. DM 8G+ is also compatible with HDBaseT Alliance specifications for connecting to HDBaseT compliant equipment. All wire and cables sold separately.
3. Supplying Power over DM (PoDM) or Power over HDBaseT (PoH) requires external power pack, model PW-4818DU, sold separately.
4. Item(s) sold separately.
5. The RGB inputs can accept component, composite, and S-Video signals via direct interface to Crestron MPS Series products, or through an appropriate adapter (not included). Input sync detection is not provided for composite or S-Video signal types through the RGB connection.
6. Deep Color and 3D video signals are only supported via HDMI input 1.
7. When a digital audio input (HDMI or SPDIF) is routed to the HDMI/DM output, the output is put in "pass-through" mode so that the digital input is the only signal that passes to that output and the audio controls on that output have no effect.

This product may be purchased from an authorized Crestron dealer. To find a dealer, please contact the Crestron sales representative for your area. A list of sales representatives is available online at www.crestron.com/salesreps or by calling 800-237-2041.

The specific patents that cover Crestron products are listed online at: patents.crestron.com.

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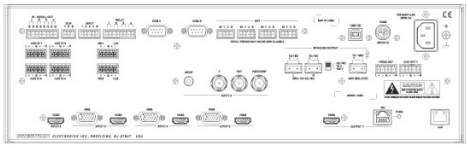
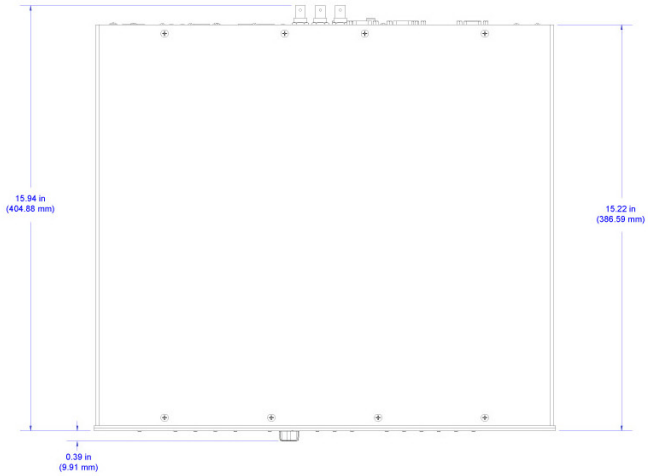
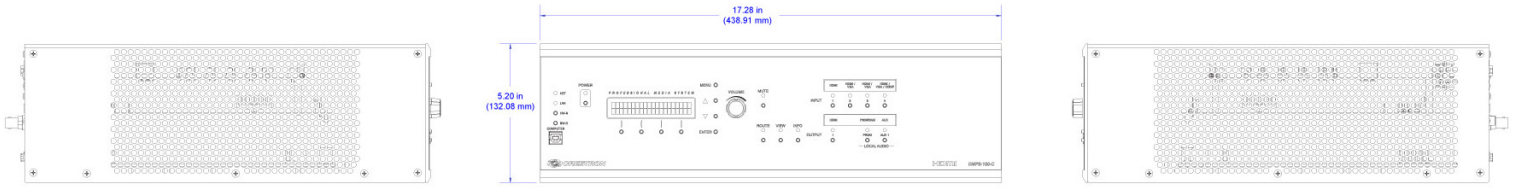
DMPS-100-C DigitalMedia™ Presentation System 100







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